

REMARKS/ARGUMENTS

Claims 1 to 64 remain in this application. Claims 2, 19, 40, 51, 56, 57 and 60 to 64 were previously presented.

The Examiner has maintained the rejection of claims 1 to 64 under 35 U.S.C. 103(a) as being obvious over Hudson U.S. Patent No. 5,968,625 (Hudson) in view of Lee U.S. Patent No. 5,643,983 (Lee). Near the bottom of page 2 of the Office Action mailed April 14, 2006 (the latest Office Action), the Examiner takes the position that Hudson “teaches that type of wood used for layers may vary and clearly suggest[s] the use of lower and higher grade veneer for individual layers.” The Examiner admits that Hudson “does not specifically teach the veneer grade” and looks to Lee for a “teach[ing] that it is customary in the art to subject plywood laminate to a standard ANSI/HPVAHP test (see column 2 lines 15-40).” The Examiner then takes the position that “[i]t would have been obvious to one having ordinary skill in the art at the time of the invention to chose the veneer grade according to standard test as suggested by Lee ‘983 in Hudson ‘625 since such would improve processability of the plywood laminate.”

However, present claims 1 and 48 require at least two pluralities of wood plies, one having a veneer grade better than ANSI/HPVA veneer grade C and another having a veneer grade no greater than ANSI/HPVA veneer grade C. The cited test of Lee is used to determine adhesive bond strength between the veneers of plywood rather than the grade of the veneers. Therefore, Lee does not teach or suggest measuring the grade of the laminate veneer, let alone specifying the veneer grades required by claims 1 and 48.

The fact that the test cited by Lee also includes a test method and veneer grade standard does not teach or suggest that the wood plies of Hudson be graded and

particularly does not teach or suggest the limitation set forth in claims 1 and 48 that one plurality of wood plies have a veneer grade better than ANSI/HPVA veneer grade C and another plurality of wood plies have a veneer grade no greater than ANSI/HPVA veneer grade C. Without such a teaching or suggestion to make the claimed combination of elements, the rejection is improper.

As stated by the Court of Appeals for the Federal Circuit in In re Kotzab, 217 F.3d 1365, 1369-1370 (2000):

“Most if not all inventions arise from a combination of old elements. Thus, every element of a claimed invention may often be found in the prior art. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant. Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference.

“The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved. In addition, the teaching, motivation or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. Whether the Board relies on an express or an implicit showing, it must provide particular findings related thereto. Broad conclusory statements standing alone are not ‘evidence.’”

(Citations omitted.) The Examiner has attempted to “provide particular finding related thereto” by stating that choosing the veneer grades of claims 1 and 48 would improve processability of the plywood laminate. However, it is not seen how choosing the veneer grades would improve processability of the plywood laminate. Without the previously

requested explanation of how choosing the veneer grades would improve processability of the plywood laminate, the Examiner's statement is a "broad conclusory statement" and not "evidence" of obviousness.

Even assuming *arguendo* that choosing the veneer grades would improve processability of the plywood laminate, there is no teaching or suggestion in the cited prior art that the claimed plurality of veneer grades of having better than ANSI/HPVA veneer grade C and no greater than ANSI/HPVA veneer grade C would provide the improved processability.

The Examiner was respectfully requested to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, for support in the form of an affidavit, in accordance with MPEP section 707. The Examiner has yet to provide such explanation or affidavit. Therefore, claims 1 and 48 must be allowed.

As set forth in *In re Fine*, 837 F.2d at 1075, 5 USPQ2d at 1600 (Fed.Cir. 1988):

"Obviousness is tested by 'what the combined teachings of the references would have suggested to those of ordinary skill in the art.' *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). But it 'cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination.' *ACS Hosp. Sys.*, 732 F.2d at 1577, 221 USPQ at 933. And 'teachings of references can be combined *only* if there is some suggestion or incentive to do so.' *Id.* Here, the prior art contains none.

The Examiner is, again, respectfully requested to point out where in the cited prior art there is a suggestion or incentive to combine Hudson and Lee. Since such a suggestion of using veneer of ANSI/HPVA grade C or lower and veneer of better than ANSI/HPVA

grade C in the same plywood laminate is absent in Hudson and Lee, claim 1 is allowable over the combination of Hudson and Lee.

Claim 2 requires a plywood laminate having an even number of plies. At the top of page 3 of the latest Office Action, the Examiner states "it would have been obvious to vary the number of plies ... since such would improve strength of the laminate." Even assuming *arguendo* that it would be obvious to vary the number of plies to improve strength of the laminate, where is the teaching or suggestion that an even number piles yields the strongest laminate? Without such a teaching or suggestion, claim 2 is allowable over Hudson in view of Lee.

Hudson specifically states that his invention is comprised of five laminated layers or plies. See column 3, lines 66 and 67; column 7, lines 46 and 47; and column 6, lines 1 to 11. Attorney for Applicants respectfully requested the Examiner to explain where in the cited art there is a teaching or suggestion of using an even number of plies of quality, or if the rejection is based on facts within the personal knowledge of the Examiner, for support in the form of an affidavit, in accordance with MPEP section 707. The Examiner has yet to provide such explanation or affidavit. Therefore, claim 2 must be allowed.

Further, claim 2 requires the lower grade plies to include at least one ply with grain in each direction, i.e. at least one lower grade ply that is cross-grain and at least one lower grade ply with grain parallel to the length of the ply. Hudson teaches that the intermediate plies 64 and 68, the 2nd and 4th plies having cross-ply grain, may be of inferior grade relative to the surface ply (column 4, lines 36 to 39). At column 8, lines 4 to 7, Hudson teaches that the center ply 66 and backing ply 70 (with grain parallel to the length of the plies) are made from new pine, whereas the intermediate plies 64 and 68 are

made from reclaimed pine sapwood. There is no teaching in Hudson of plies with grain in different directions being of a lower grade.

The Examiner was respectfully requested to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, for support in the form of an affidavit, in accordance with MPEP section 707. Near the top of page 3 of the latest Office Action, the Examiner referenced column 1, lines 45 to 55, of Hudson for a teaching of grain direction. However, this citation teaches "alternating plies [being] laid transverse to each other." Since Hudson teaches alternating the inferior grade plies and the grain direction, there is no teaching or suggestion of the same grade of plies having transverse grain directions. Therefore, claim 2 must be allowed over the cited prior art.

Claim 3 requires the laminate to have 6 plies. Again, Hudson teaches a laminate with 5 plies. Claim 3 also requires two adjacent plies to be of a lower grade. There is no teaching in Hudson of adjacent plies being of a lower grade. The Examiner was respectfully requested to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, for support in the form of an affidavit, in accordance with MPEP section 707. The Examiner has yet to provide such explanation or affidavit. Therefore, claim 3 must be allowed.

Claim 4 requires the second opposed ply to have a thickness less than the thickness of the other plies, claim 5 requires the second opposed ply to have a thickness approximately two-thirds of the thickness of the other plies, claim 24 requires the back ply to have a thickness less than the thickness of the other plies, and claim 25 requires the

back ply to have a thickness approximately two-thirds of the thickness of the other plies. Near the middle of page 3 of the latest Office Action, the Examiner states that "it would have been obvious to optimize thickness ... of the individual layers since such is known to improve mechanical properties of the laminate." Again, Attorney for Applicants respectfully requests that the Examiner explain how making the second opposed ply or the back ply thinner than the other plies improves mechanical properties of the laminate. Without such an explanation, there is no motivation to make such a modification, as required by In re Fine, supra, and the rejection of claims 4, 5, 24 and 25 is improper.

Claims 6 and 7 require the first opposed ply, which is a higher grade ply, to have a quality less than the quality of the other higher grade plies, i.e. there are three different quality of plies. In similar manner claim 26 requires crossband ply adjacent the decorative ply, which is a higher grade ply, to have a quality less than the quality of the other higher grade plies. Attorney for Applicants respectfully requested the Examiner to explain where in the cited art there is such a teaching or suggestion of using three different qualities of plies, or if the rejection is based on facts within the personal knowledge of the Examiner, for support in the form of an affidavit, in accordance with MPEP section 707. The Examiner has yet to provide such explanation or affidavit. Therefore, claims 6 and 7 must be allowed.

Claims 8 and 27, and claims 9 and 28 require the plies to be hardwoods, and meranti or lauan, respectively. The Examiner has not yet pointed to a teaching or suggestion in the prior art of such features in combination with the specified grades of veneer. Attorney for Applicants respectfully requested the Examiner to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts

within the personal knowledge of the Examiner, for support in the form of an affidavit, in accordance with MPEP section 707. The Examiner has yet to provide such explanation or affidavit. Therefore, claims 8, 9, 27 and 28 must be allowed.

Claims 12, 13, 31 and 32 require a moisture barrier applied to the exposed surfaces of the laminate. Attorney for Applicants respectfully requested the Examiner to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, for support in the form of an affidavit, in accordance with MPEP section 707. Near the middle of page 3 of the latest Office Action, the Examiner cited column 2, lines 1 to 10, of Hudson for a teaching of moisture content for veneer laminates. However, the cited passage does not teach or suggest a moisture barrier. Without such a teaching or suggestion, claims 12, 13, 31 and 32 must be allowed.

Claims 14 and 33 require the plies to have a grain direction of 1/48 or less. The Examiner has not pointed to a teaching or suggestion in the prior art of such features, particularly in combination with the specified grades of veneer. Attorney for Applicants respectfully requested the Examiner to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, for support in the form of an affidavit, in accordance with MPEP section 707. The Examiner has yet to provide such explanation or affidavit. Therefore, claims 14 and 33 must be allowed.

Claim 17 requires the total number of plies in the plywood laminate to be 4, 6 or 8. Claim 17 is allowable for the same reasons as claims 2 and 3.

Claim 21 requires the crossband plies to include a higher grade ply and a lower grade ply. The Examiner has not pointed to a teaching or suggestion in the prior art of such a feature, particularly in combination with the specified grades of veneer. Attorney for Applicants respectfully requested the Examiner to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, for support in the form of an affidavit, in accordance with MPEP section 707. The Examiner has yet to provide such explanation or affidavit. Therefore, claim 21 must be allowed.

The Examiner has not pointed to any prior art which shows a decorative plywood laminate having different grades of veneer plies with the crossband ply adjacent the decorative ply being a higher grade ply. Absent such a suggestion, claim 22 is allowable.

Likewise with respect to claim 23, the Examiner has not identified any prior art that shows the specifically claimed structure, particularly two adjacent plies being lower grade plies. Therefore, claim 23 is allowable.

At the bottom of page 3 of the latest Office Action, the Examiner takes the position that regarding "claims related to tongue and groove and click-lock connections the examiner submits that such connections are so well established in the art that it would have been obvious to one having ordinary skill in the art to incorporate such connections into any design for laminated veneer." This is the type of broad conclusory statement the Appeals for the Federal Circuit in In re Kotzab, supra, counseled against.

At the time of filing the present application, applicants did not know of any plywood laminates having a click-lock connection. Due to the different materials and different structures, it is not obvious that a click-lock tongue formed from a plywood

laminated could function, for example, would the tongue be strong enough and flexible enough. If the Examiner is correct that such connections were so well established, the Examiner should be able to find prior art to support that position.

Again, as stated by the Court of Appeals for the Federal Circuit in In re Kotzab, 217 F.3d 1365, 1369-1370 (2000):

“Most if not all inventions arise from a combination of old elements. Thus, every element of a claimed invention may often be found in the prior art. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention. Rather, to establish obviousness based on a combination of the elements disclosed in the prior art, there must be some motivation, suggestion or teaching of the desirability of making the specific combination that was made by the applicant.

“The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved. In addition, the teaching, motivation or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. Whether the Board relies on an express or an implicit showing, it must provide particular findings related thereto. Broad conclusory statements standing alone are not ‘evidence.’”

Without support in the prior art or an affidavit of the Examiner, the Examiner’s rejection of the click-lock claims is at most an invitation to try a click-lock tongue and groove on a plywood laminate. “Obvious to try” is not the standard under Section 103. See In re O’Farrell, 853 F.2d 893, 903 (CAFC 1988):

“The admonition that ‘obvious to try’ is not the standard under § 103 has been directed mainly at two kinds of error. In others, what was ‘obvious to try’ was to explore a new technology or general approach that seemed to be a promising field of experimentation, where the prior art gave only general guidance as to the particular form of the claimed invention or how to achieve it.”

(Citations omitted.) While it may have seemed promising at the time of filing the present application to use a click-lock profile on a plywood laminate, the Examiner has not pointed to a prior art reference which gives guidance to use a click-lock profile on a plywood laminate. Therefore, unless the Examiner can find a reference to support the position, there was, at most, only a general guidance taught in the prior art, the rejection is improper, and claims 41, 44, 52 and 56 to 63 must be allowed.

Further, claims 41, 52 and 60 require the thickness of the click-lock tongue to be greater than the thickness of each of the plies of the substrate and claims 44, 56 and 57 require the click-lock tongue to include an adhesive layer. Attorney for Applicants respectfully requested the Examiner to explain where in the cited art there are such teachings or suggestions, or if the rejections are based on facts within the personal knowledge of the Examiner, for support in the form of an affidavit, in accordance with MPEP section 707. The Examiner has yet to provide such explanation or affidavit. Therefore, claims 41, 44, 52, 56, 57 and 60, and the claims dependant thereon must be allowed.

Claims 46 and 59 require the decorative ply to comprise a polymer resin-impregnated layer and a printed pattern applied to the resin-impregnated layer. Attorney for Applicants respectfully requested the Examiner to explain where in the cited art there is a teaching or suggestion of a decorative ply comprising a polymer resin-impregnated layer and a printed pattern applied to the resin-impregnated layer in combination with the specified grades of veneer, or if the rejections are based on facts within the personal knowledge of the Examiner, for support in the form of an affidavit, in accordance with

MPEP section 707. The Examiner has yet to provide such explanation or affidavit.

Therefore, claims 46 and 59 must be allowed.

Claim 47 requires one exposed ply to be of higher quality, the adjacent ply to be of lower quality and the next adjacent ply to be of lower quality. Attorney for Applicants respectfully requested the Examiner to explain where in the cited art there are such teachings or suggestions, or if the rejections are based on facts within the personal knowledge of the Examiner, for support in the form of an affidavit, in accordance with MPEP section 707. The Examiner has yet to provide such explanation or affidavit. Therefore, claim 47 must be allowed.

Claim 49 requires three types of plies, a higher quality hardwood, a lower quality hardwood and a lower quality softwood. Attorney for Applicants respectfully requested the Examiner to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, for support in the form of an affidavit, in accordance with MPEP section 707. The Examiner has yet to provide such explanation or affidavit. Therefore, claim 49 must be allowed.

Claim 62 requires the projection of the click-lock connection to comprise at least three plies. Attorney for Applicants respectfully requested the Examiner to explain where in the cited art there is such a teaching or suggestion, or if the rejection is based on facts within the personal knowledge of the Examiner, for support in the form of an affidavit, in accordance with MPEP section 707. The Examiner has yet to provide such explanation or affidavit. Therefore, claim 62 must be allowed.

Attorney for Applicants submits that all the claims are in a condition for allowance. Therefore, early consideration and allowance are respectfully requested.

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Respectfully submitted,

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Glenn K. Wilkey